

10/15/85 MN.01-1
MN, 1

MEMORANDUM

TO: FILE
FROM: S. Jones
SUBJECT: Elimination report - Elk River

SITE NAME: ELK RIVER REACTOR ALTERNATE NAME:
CITY: ELK RIVER STATE: MN

COWNER (S)
Past: Current:
Owner contacted yes. no: if yes, date contacted

TYPE OF OPERATION
& Research & Development Facility Type
 Production scale testing Manufacturing
 Pilot Scale University
 Bench Scale Process Research Organization
 Theoretical Studies Government Sponsored Facility
 Sample & Analysis Other boiling water reactor
part of the reactor demonstration program
 Production
 Disposal/Storage

TYPE OF CONTRACT
 Prime Other information (i.e., cost + fixed fee, unit price, time & material, etc)
 subcontractor
 Purchase Order

Contract/Purchase Order # AT (11-1)-651 RCPA* + AEC

CONTRACTING PERIOD: 11/62 - 1/68

OWNERSHIP:

	AEC/MED OWNED	AEC/MED LEASED	GOVT OWNED	GOVT LEASED	CONTRACTOR OWNED	CONTRACTOR LEASED
LANDS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BUILDINGS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EQUIPMENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ORE OR RAW MATL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FINAL PRODUCT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WASTE & RESIDUE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Land was leased from the Rural Cooperative Power Assn (RCPA)
unirradiated fuel was shipped back to the manufacturer,
United Nuclear Corporation

AEC/MED INVOLVEMENT AT SITE

Control

- AEC/MED managed operations
- AEC/MED responsible for accountability
- AEC/MED overviewed operations
- Contractor had total control
- unknown

- Health Physics Protection
 - Little or None
 - AEC/MED responsibility
 - Contractor responsibility

Contractor operated

MATERIALS HANDLED:

Type (on basis of records reviewed)

~~☒~~ ~~☒~~ No Radioactive

Natural Radioactive from Feed Materials Production

- ore
- Refined Source Material
- Residue

Natural Radioactive Material from Non-Nuclear Activities

Man-Made

Other _____

Comment _____

Quantities (on the basis of records reviewed)

~~☒~~ ~~☒~~ ~~☒~~ ~~☒~~ Production Quantities

Small Amounts

Comment _____

OTHER PERTINENT FACTS:

Facility was Licensed

During AEC/MED-Related Operations

For Similar Activities

For Other Activities

Comment _____

~~☒~~ ~~☒~~ Commercial Production Involving Radioactive Material during AEC/MED Operations

Facility was Decontaminated and Released

Availability of Close Out Records

- None
- Some
- sufficient

Radioactive Statue:

	YES	MAYBE	PROBABLY N	O
			NCT	

Contaminated Potential for Exposure (accessible!)	---	---	---	X
	---	---	---	---

QUANTITY OF RECORDS AVAILABLE:

Very Little Some Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

Low Possible High

RECOMMENDATIONS:

Eliminate
 Consider for Remedial Action
 Collect More Data

Comment The facility was decommissioned from 1971-74

REFERENCES:

1. Environmental Statement (WASH-1516)d, Elk River Reactor Dismantling, Elk River, Minnesota. May 1972
2. Final Elk River Reactor Site Survey: Results and Summary (C00-651-92), July 23, 1974
3. AEC-ELK River Reactor Final Program Report (C00-651-93), September, 1974. Revised November, 1974
4. Final Elk River Reactor Program Report (C00-651-93)d, November 1974
5. McConnon, D. and Nemec, J.F., Experiences In Decontamination/DeCommissioning of the Elk River Reactor, April, 1974

Summary: The reactor was dismantled and decommissioned by 1974. The site is currently being used for a coal-fired plant (per 8/13/84 phone conversation w/ the United Power Assn in Elk River)

Elk River Reactor
Radiological Summary

Introduction

The Elk River Reactor was constructed by the U.S. Atomic Energy Commission at Elk River, Minnesota, as part of its power reactor demonstration program. Elk River is located approximately 30 miles northwest of Minneapolis, Minnesota (see Figure 1). The reactor, a boiling water type having a thermal rating of 58.2 megawatts, was operated from November 1962 through January 1968. An AEC Contract (No. AT (11-1)-651) with the Rural Cooperative Power Association (RCPA) required dismantling of the reactor and removal of all detectable reactor originated radioactivity when operations ceased. Fuel elements and control rods were removed from the site shortly after plant shutdown in January 1968. The reactor was dismantled in 1971.

Radiological Status

After completion of dismantling activities and prior to backfill of the cavities, a final radiation survey of the site was performed during June and July of 1974 to verify that all radioactivity hazardous to public health and safety had been removed. Solid materials resulting from the dismantling which contained detectable reactor originated radioactivity was disposed of outside the state of Minnesota. The total radioactive inventory of reactor components was 9,869.3 curies as of April 30, 1971. No evidence of radiation levels in excess of normal background were found during the final site survey. Detailed results of the survey are summarized in report COO-651-92, Final Elk River Reactor Site Survey Results and Summary, dated July 23, 1974.

Elk River Reactor Plant Location
Elk River, Minnesota

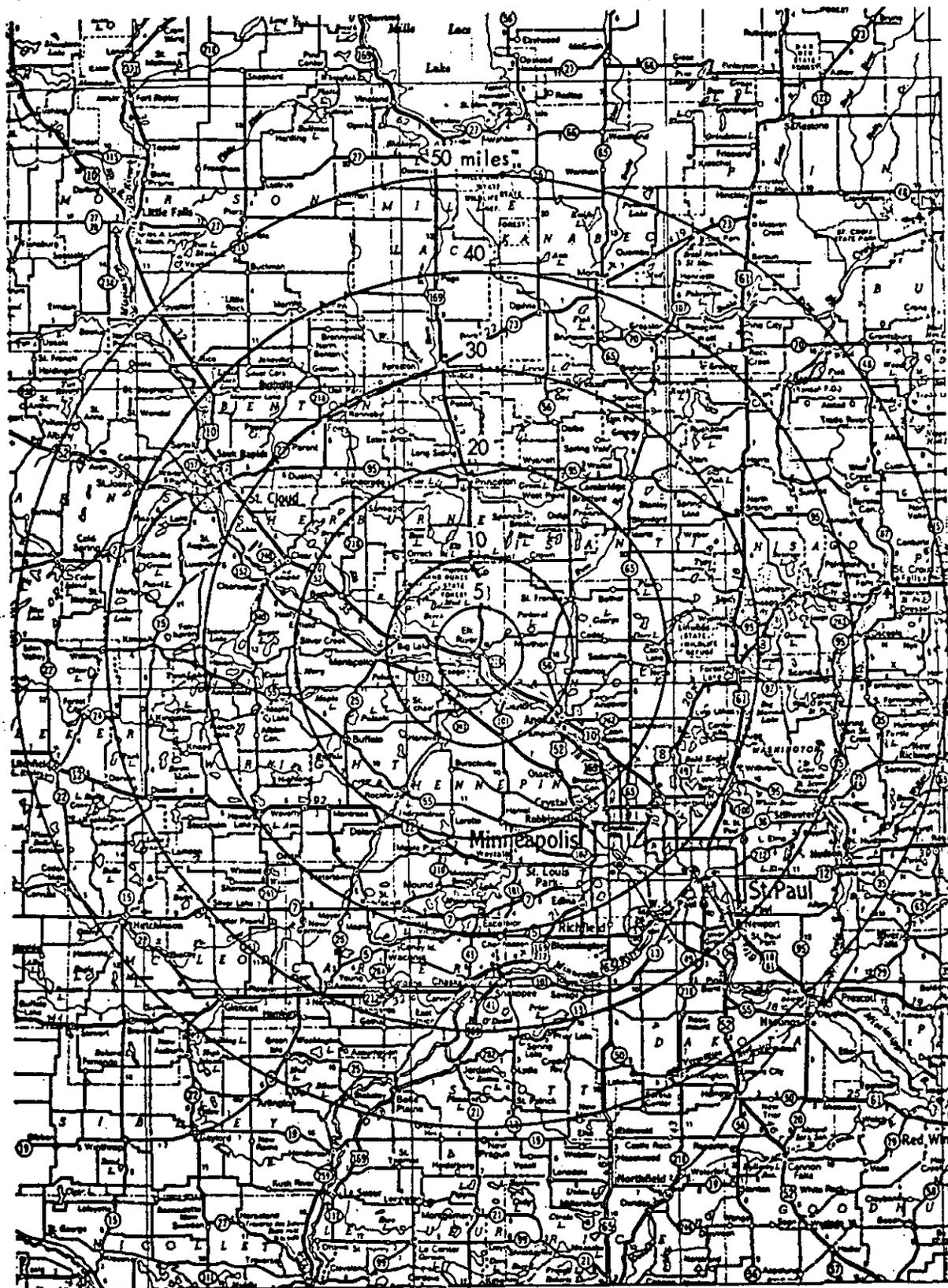
Figure 1

Current Use

After completion of the dismantling operation, the Intent of RCPA was to use the reactor site for facilities associated with its fossil-fired electric generating plant. A recent (August 13, 1984) telephone conversation with the United Power Association in Elk River, Minnesota, confirmed that the former Elk River Nuclear reactor site is currently being used for a coal-fired power plant.

Bibliography

1. Environmental Statement (WASH-1516)d, Elk River Reactor Dismantling, Elk River, Minnesota, May 1972
2. flnal Elk River Reactor Site Survey: Results and Summary (C00-651-92), July 23, 1974
3. AEC-ELK Rlver Reactor flnal Program Report (C00-651-93). September, 1974. Revised November, 1974
4. Flnal Elk Rlver Reactor Program Report (C00-651-93)d, November 1974
5. McConnon, D. and NemeC, J.F., Experiences In Decontamination/DeCommissioning of the Elk River Reactor, April 1, 1974



ELK RIVER REACTOR PLANT LOCATION
Elk River, Minnesota

Figure X 1